

# The Metrics of Workforce Planning

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A key feature of any workforce planning effort is the need to project workforce requirements and then design strategies to meet those requirements. The problem is how to do this accurately and effectively. The particulars of workforce planning as a strategic and practical activity are addressed in various publications and reflect the many unique philosophies behind them. This paper presents a select review of the metrics that have gone into workforce planning with an emphasis on the experiences and approaches used in the public sector.

Compared with just a few years ago, the amount of information to be found on the workforce planning efforts of public sector organizations has increased markedly — particularly on the Internet. As public sector organizations became aware of the huge losses they could suffer to the retirement of the so-called baby boomer generation, there was a call to arms to prepare and mitigate this loss of labor and skills. One response was for public sector organizations to conduct workforce planning to take full stock of the impact of the potential employee exodus and to identify with the precision possible what their workforce must look like in the future and how to bridge the gap between the “now” and the future. Allan Schweyer<sup>1</sup> had a particularly pointed view on whether or not a substantive labor shortage or skills shortage was really on the way. He decided that the term “perfect storm” described the pending situation very well.

A variety of organizations have workforce-planning models that they have started to use or will soon start to use to address their “perfect storm.” The models (or variations on the same model) are too numerous to mention. There is a good deal of eclecticism. That said, it is hopefully no insult to the work being done in this area to describe the models as being dependent upon four essential steps conducted under color of what is known about the strategic direction of the organization. In abbreviated form, these workforce-planning steps consist of 1) *supply analysis*, 2) *demand analysis*, 3) *gap analysis* and 4) *solution analysis*. Many organizations have adopted the slogan that workforce planning is getting the right people in the right job at the right time. How public sector organizations do this has taken different directions with different levels of specificity.

How workforce planning is actually deployed in the public sector can be varied. As has been observed and summarized elsewhere, planning has been deployed from the centralized to the decentralized or hybrid fashion, from the elective to the mandated, to the occasional or one-time process to the ongoing/institutionalized, and from the dynamic to the static.<sup>2</sup> Clearly, there is no universal agreement on all the means and methods to be used.

One thing that is abundantly clear in reviewing the methods, practices, and procedures of numerous jurisdictions is that there is an enormous amount of sharing and cross-pollination that has taken place. The formulation of methods, practices and procedures seem to have been enriched greatly through benchmarking at least some of the workforce planning practices of other organizations or using templates and tools of different approaches. That being the case, this author wishes to apologize in advance if the work of some jurisdiction has gone uncredited and unmentioned when it was cited as being used by another location that was credited or mentioned. Also, an Internet search quickly reveals that many central government agencies like the United States Office of Personnel Management or the Texas Office of Planning and Budget have promulgated workforce-planning rules, techniques and tools for their constituent agencies. For the purposes of this article, this author paid the greatest attention to agencies that used the rules, techniques or tools to develop a workforce plan. The point behind this article is to give an overview of the metrics being employed to support workforce planning in its current very eclectic form.

## **The Basic Workforce Planning Model**

The United States Department of Health and Human Services (HHS) published its workforce planning guide in 1999.<sup>3</sup> It has some helpful information that fleshes out the elements of the basic workforce planning model found in use by many organizations.<sup>4</sup>

HHS begins with *supply analysis* focusing on "identifying organizational competencies, analyzing staff demographics, and identifying employment trends." The competency analysis part of this is said to provide baseline data on the existing organization and present staff. The trend analysis part of this is describing and forecasting models for how turnover will affect the organization if no action is taken. Further, trend analysis is said to directly inform the solution analysis.<sup>5</sup>

*Demand analysis* measures future activities and workloads plus describes what competencies the workforce of the future will need. Said another way, demand analysis tries to quantify the impact that the changing work will cause whether stemming from technological changes or other sources.

*Gap analysis* compares the supply and demand analysis to understand the differences between the "now" and the future. "Gap analysis identifies situations in which the number of personnel or competencies in the current workforce will not meet future needs (demand exceeds supply) and situations in which current workforce personnel or competencies exceed the needs of the future (supply exceeds demand)."<sup>6</sup>

*Solutions analysis* is developing the strategies to close the gaps in competencies and to curtail surplus competencies. HHS points out that planned recruiting, training, re-training, and placement of employees are all possible solutions meant to address gaps of this kind.

There are a number of organizations<sup>7</sup> worth visiting electronically to compare and contrast the deployment of workforce planning models. Notably, there are different levels of analysis employed by public sector organizations. Perhaps the differences are influenced as much by the data they have at their disposal as by the core elements

of their job classification and human resources management systems. In particular, note that the levels of analysis for the purposes of the model are variously "skills," "competencies," "job classifications" or "occupational groups."

Christina Morfeld, in a recent HR.COM article,<sup>8</sup> summarizes the aforementioned approach to workforce planning as consisting of the following activities to be performed by an organization:

- Gaining a thorough understanding of your current workforce;
- Envisioning the operating environment that will most likely exist in the future;
- Identifying the competencies that will move the firm forward to overcome challenges, seize opportunities, and thrive in what will undoubtedly be a new world of work; and
- Developing strategies and implementing tactics for building this workforce.

A panel for the National Academy of Public Administration<sup>9</sup> identified the following critical success factors for effective workforce planning:

- *Management commitment and support.* Top management must lead development and implementation of workforce plans.
- *Human resources staff support.* HR offices should ensure that information is readily available.
- *Employee involvement.* Planning efforts involve evaluating the current competencies of the workforce and developing strategies to build new competencies.
- *Linkage to other plans.* Workforce plans must be established within the context of strategic plans and financial plans so that they are relevant to the strategic intent of the agency, and are affordable given finite resources.
- *Quality planning data.* Information about the workforce must be current, accurate, and readily available to HR staffs and those line managers who will be involved in the planning process.
- *Implementation strategy.* Specific details outlining how the workforce plan will be implemented must be developed and communicated.
- *Communication.* Managers and employees need to know why and how workforce planning fits into their daily lives.

Quality information is available on the process and importance of workforce planning so no attempt is made here to thoroughly cover that topic. The following recent publications span the theoretical to the practical and seem particularly germane to public sector human resources professionals:

IPMA-HR (2002): Workforce Planning Resource Guide for Public Sector Human Resource Professionals. International Public Management Association for Human Resources. 1617 Duke Street, Alexandria, VA 22314. [www.ipma-hr.org](http://www.ipma-hr.org).

Young, Mary (2003): *The Aging and Retiring Government Workforce*. Lexington, MA: Center for Organizational Research, a division of Linkage, Inc. Available as a free download at <http://www.cps.ca/publications>.

Emmerichs, R., Marcum, C., & Robbert, A. (2004): *An Operational Process for Workforce Planning*. Arlington, VA: RAND. RAND URL: [www.rand.org](http://www.rand.org)

Marthis, R.L., & Jackson, J. H. (2003): *Human Resource Management* (10 ed.). Southwestern College Publishing.

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So how does an organization conduct a supply analysis and a demand analysis so thoroughly and so authoritatively that a gap analysis turns the compass point straight to the directions an organization must follow to have the right people in the right job at the right time? There is no universal approach in this regard. However, it seems to be absolutely key to the success of workforce planning.

Getting from supply to demand not only relies upon the knowledge of trends that may be recognizable from the workforce of the past (that is, those internal and external forces that are in large part identifiable) but it also may rely upon a future that can't be quantified. Unfortunately, internal and external forces yet to be revealed certainly keep the practice of workforce planning and the calculation of planning metrics from being simple.<sup>10</sup>

## **Commercial Solutions**

In preparation for this article, a quick survey was conducted of the commercial software that is available to assist organizations with human resource analytics that might have powerful tools to reveal supply and demand data necessary for gap analyses. The reviews were not designed to be exhaustive.

Many software solutions automate HR procedures to reduce task time and cost. Kronos<sup>11</sup> markets a number of trademarked HRIS products named Workforce HR™, Workforce Payroll™, Workforce Scheduler™, Workforce Timekeeper™, Timekeeper Center® and ShopTrac Pro®. Most of these assist the functions of time and attendance, scheduling, production control and payroll but don't seem to support too much in the way of analytics for movements or changes taking place in the workforce. Ultimate Software<sup>12</sup> markets a suite of payroll and employee management solutions in the form of eEmployee Self-Service, eManagement, eAdministration, eStandard Reporting, eSystem Administrator, eHuman Resources, eRecruitment and others. Spectrum<sup>13</sup> focuses on the elimination of many administrative duties with their iVantage® and HRVantage® HRIS products.

PeopleSoft,<sup>14</sup> SAS<sup>15</sup> and SAP<sup>16</sup> have specifically marketed workforce planning and workforce analytics software solutions under their statistical, enterprise performance management or ERP solutions. It was difficult to get many specifics on the methods being used. Generally speaking, and focusing principally on workforce planning, there

seem to be at least two information dependencies and at least one organizational dependency to using the software effectively. The first information dependency is historical information about staffing levels that can be translated into attrition figures that, in turn, can be translated into projected replacement needs. The second information dependency is the need for the workforce to be associated with and described by competencies or roles or both. The organizational dependency is to fully outline the human capital requirements needed in the future (in terms of competencies and/or roles to be performed) and to judge by likely attrition an increased or decreased need if the required competencies and/or roles will exist in the future workforce and if not, what and who will be needed to carry out the organizational strategy.

There also appear to be software work assistants to help the process of forming recruiting, training and other plans around the information, to associate costs with roles, and so forth. The ability of the organization to front-load the competency or role information and to have true historical information is crucial. That is, the analytical capabilities appear to be there if the organization has invested the time and effort to populate the human resources records with sufficient information to conduct the analyses. If the information is not readily available in human resources records within the given ERP, viable software solutions appear to be available that will sit atop legacy systems and records and allow reporting on information and data that have not been converted to new systems.<sup>17</sup>

## **Public Sector Approaches**

There is a good deal of information about how public sector organizations have approached workforce planning and the metrics they used to conduct supply analysis and demand analysis so that they could inform the gap analysis and lead to viable solutions. Many public sector organizations have posted their workforce planning methods and statistics on the Internet.

The **state of Minnesota**<sup>18</sup> has laid the groundwork for workforce planning within its jurisdiction supported by both a comprehensive manual and a Web site. While data forms are not yet populated on the Web site, it is clearly an ambitious effort.

The manual and Web site point to the metrics that the state believes are of value in establishing this critical connection between the supply analysis and demand analysis. The following excerpt from the text of Minnesota's manual provides a description; it is a nice synthesis of workforce planning approaches advocated by IPMA-HR, the tools designed by United States Office of Personnel Management, and others:

### **1. Supply Analysis**

Supply analysis examines the current and future composition of the workforce and workload. To perform this analysis, you will need to consider the organization's workforce, workload and competencies as integrated elements. ... The demographic data ... provide "snapshots" of the current workforce for the supply analysis process. To project the future workforce supply, you can use transaction data to identify employment trends.

You can obtain necessary baseline data by reviewing changes in workforce demographics by occupation, grade level, organizational structure, race/national origin, gender, age, length of service and retirement eligibility. Your organization can then develop valuable information on areas such as retirement eligibility or turnover for a given point in the future by projecting from current workforce demographic data. Personnel transaction data for your organization can help you identify baselines such as turnover rates. It can also provide powerful tools to forecast workforce changes in the future that may occur from actions such as resignations and retirements. While projecting demographic data can provide useful information on issues such as retirement eligibility, trend data can provide powerful predictors of how many employees will actually retire, resign, or transfer. In conjunction with demographic data, transaction data help HR professionals and other managers forecast opportunities for workforce change that can be incorporated into the action plan . . .

### **Developing an Attrition Forecast**

As part of your supply analysis, you will need to develop an attrition forecast that will also help you analyze your demand for new workers. Your organization will want to specify assumptions based on factors specific to your organization to forecast an attrition rate. These factors include estimates of the number of employees who will separate: resign, transfer, be dismissed, or retire.

A general attrition rate is a calculation. For example, the number of resignations + the number of transfers + the number of retirements divided by the total number of employees = the **attrition rate percentage**.

It is important to understand the components of the attrition rate so you can make adjustments. For instance, if you have a planned voluntary retirement program, it may affect the retirement and/or resignation rate, and thus increase your demand for additional workers.

The literature suggests some organizations have used an annual attrition assumption of 4.5 percent. Of course, this varies depending on the size of your organization, hiring freezes, downsizing or economic changes. You may choose to develop your own attrition forecast.

## **2. Demand Analysis**

Demand analysis examines future activities, workloads and the competency sets your workforce of the future will need. In demand analysis, you will have to consider workforce shifts driven by changing work tasks, workload and technology. Of course, even if none of those factors changes, you will still have demand for more workers because of turnover in your current workforce.

The demand analysis generates: quantitative data on anticipated workload and workforce changes during the planning period; quantitative and qualitative data on future competency requirements.

The results of demand analysis will establish requirements for your organization's future workforce and workload, and lead to an assessment of competencies. The methods you will use to examine workload and workforce needs are the same as those described in the Approaches to Workforce Planning section of this document, where they are discussed as if these were the only approaches your organization would take to workforce planning. If you were doing a comprehensive workforce plan, this information would be used in the demand analysis and would help you identify and define the competencies your organization will require.

The U.S. Bureau of Labor Statistics (BLS) collects a vast amount of data that can help you conduct demand analysis. ... BLS data include employment projections, occupational outlooks, demographic profiles and much more. Such data is available at [www.bls.gov](http://www.bls.gov).

### **Identifying the Competencies Needed to Meet Demand**

A key aspect of assessing the demand for human capital in your organization will be looking at the competencies your organization will need to achieve its strategic goals. Even if you are largely just using the workforce or workload approaches, you likely will consider the competencies your workforce will need.

Your organization can identify its core competencies by studying how top performers succeed because competencies focus on the attributes that separate those high performers from the rest of the workforce. You can gather information in a variety of ways: administering employee questionnaires, facilitating focus groups, and interviewing managers and employees.

Two key elements in identifying competencies are:

- **Workforce skills analysis**, which describes the skills required to carry out a function. Conducting workforce skill analysis requires the leaders of your organization to anticipate how the nature of the organization's work will change and to then identify future HR requirements. (This process spans the supply analysis and demand analysis aspects of workforce planning.)
- **Job analysis**, which collects information on successful job performance. Job analysis focuses on tasks, responsibilities, knowledge and skill requirements as well as other factors that contribute to successful job performance. The information you obtain from employees during job analysis becomes the basis for identifying competencies. Competency and skill analysis tools are available from the U.S. OPM at <http://www.opm.gov/workforceplanning/>.

The **state of Texas** has been busy publishing workforce planning documents for its state agencies. These are available for viewing on the Internet. The state has highlighted the reports that are particularly good representations of the types of analyses reflected in the Minnesota excerpt. For example, the Texas Department of Transportation<sup>19</sup> has a 2002-2006 plan where the basic components of workforce planning have been completed in the form of supply analysis ("current workforce profile"), demand analysis ("future workforce profile"), gap analysis and so forth. Being no small operation (14,525 employees in May 2002), workforce planning certainly seemed feasible and important.

The Texas Web site contains a great deal of demographic information by race and major job category along with retirement eligibility before and within the years of the planning cycle. The state also identified through an analytical process what critical workforce skills were necessary to accomplish their goals and mission (e.g., analyzing, developing, planning and so forth), the types of shortages anticipated, and critical functions that must be performed to achieve the strategic plan. This led to programs to address the future needs.

The **commonwealth of Virginia**<sup>20</sup> presents a fairly detailed process and tools for performing the supply side of workforce planning. It also has accumulated backward-looking trends in workforce movement by salary group, gender, race, turnover, location and so forth to set the tone and direction of planning to take place at the constituent levels of government.<sup>21</sup>

Looking at the workforce data using a broad-spectrum approach has not received universal acceptance. There are examples where using and trending all available demographic data has been abandoned for the most part in favor of concentrating on more focused workforce planning metrics. The **commonwealth of Pennsylvania** is one such example. As described by the Center for Organizational Research, the commonwealth has been selective in its efforts:

Rather than responding to the total number of retirements, Pennsylvania

- Looks at average age and age distribution at the occupation-group level, rather than focusing on the state-wide numbers;
- Uses a "Retirement Probability Factor" to gauge which occupations groups will be most affected, and when;
- Focuses on occupations where it's most difficult to hire and/or train replacements;
- Conducts workforce planning at the most appropriate levels — either the agency or governor's office;
- Tailors recruitment and retention initiatives to specific occupational groups.

To be more specific on its metrics, Pennsylvania is reported to calculate historical percentage of employees in each job classification who retired as soon as they became eligible rather looking at eligibility alone. To put a finer point on the numbers, the state continues the calculation of the "retirement probability factor" to the first,



second and third years following eligibility. This approach allows the state to gain perspective on how dire and probable any retirement wave might be plus allows actions to be selective around the jobs that need the most attention. Additionally, these data can reveal important information on both sides of the supply equation. That is, if workforce planners note that certain types of employees (competencies, skills, jobs) will be in excess supply compared to what is needed in the future, they will know with a fair amount of precision whether administrative action must be taken to address the oversupply or if the size of the supply will likely correct itself. If more work needs to be performed to anticipate and address a dearth of employees (competencies, skills, jobs) likely to result from retirements, these historical data are clearly of value.<sup>22</sup>

The point of the story for Pennsylvania is that it has effectively refined the art of anticipating "normal" attrition based on past experience. Harkening back to the earlier references to software solutions for workforce planning, Pennsylvania has invested heavily in an SAP implementation to bring its workforce planning efforts to a new level. One feature to go to the demand side of workforce planning is to track every employee's skills and training so the state can compare them with those needed to fill anticipated vacancies.<sup>23</sup> See the article in this issue, "Pennsylvania's Changing Workforce," for more on Pennsylvania's experience.

A selective review of promising practices in addressing the aging-and-retiring government workforce is documented in the CPS/Center for Organizational Research publication researched over a 12-month period and published in 2003. Among these is the "Data rule." "Securing accurate data is the essential, first step in addressing the challenges of an aging and soon-to-retire workforce." With such information, a jurisdiction can:

- Plan effectively,
- Identify areas needing immediate attention,
- Persuade senior executives and policy-makers, and
- Mobilize individual stakeholders to take action.

## **Workforce "Shape"**

CPS Human Resource Services, a sponsor of the study, had some important observations.<sup>24</sup> Particularly interesting to this discussion is the following: "It's not *just* about the numbers; it's about the shape of the workforce." This idea of shape brings us to the approaches with which this author will conclude.

Probably the most practiced and precise workforce planning metrics can be found in use by the U.S. Army. Central to this is their Workforce Analysis & Support System (WASS+) for analysis and their Civilian Forecasting System (CIVFORS).<sup>25</sup> The basic questions answered by the analytic tool (WASS+) include "When do people retire," "What happens to retirements as the number of retirement eligibles increase," "What do the retirement bubbles look like," "What are the key relationships between gains and losses needed to maintain workforce continuity," and "Have loss rates

changed over time.” The stated uses of WASS+ for planning and policy are to address whether it is time to offer incentives, what types of replacements and ratios maintain continuity in the workforce, and so forth.

The basic questions answered by the forecasting tool (CIVFORS) are “Given upcoming retirement waves and the need to stabilize population size, what are the accession requirements,” “What are the projected intern requirements,” and “How long will it take to get to a balanced workforce in age and years of service.” This information is used in planning and policy to take stock of projected job fill needs and to focus on how many employees in what occupations are needed to be hired and by when, can current personnel strategies help meet the need and if not, what needs to be done instead.

According to a presentation by Dr. Engin Crosby, The CIVFORS projections are based on 1) Life-cycle modeling of the civilian workforce based on accessions, promotions, reassignments, retirements, voluntary separations and involuntary separations; 2) Time series forecasting techniques to computer probabilities of occurrence for modeled life cycle events; 3) Personnel characteristics (membership in groups) from the workforce being used as predictors of modeled behavior; 4) Historical and assumed future changes in characteristics and behaviors of the workforce driving the forecasts.<sup>26</sup> The 2004 Rand National Defense Research Institute publication describes some of the analytics involved.<sup>27</sup>

Clearly, the metrics and forecasting capabilities have come from a long experience in assessing and responding to workforce needs and have the benefit of drawing upon nearly 30 years of trends in the military uniformed and civilian workforces. Therefore, for most all components and facets of the workforce, the shape of that workforce can be forecasted under current supply trends and evident needs can be responded to.

The RAND National Defense Research Institute fleshes out this idea of shape with four thematic questions that an organization that conducts workforce planning must answer:

1. What critical workforce characteristics will the organization need in the future to accomplish its strategic intent, and what is the desired distribution of these characteristics?
2. What is the distribution in today’s workforce — of the workforce characteristics needed in the future?
3. If the organization maintains current policies and programs, what distribution of the characteristics will the future workforce possess?
4. What changes to human resource management policies and practices, resource decisions, and other actions will eliminate or alleviate gaps (overages or shortages) between the future desired distribution and the projected future inventory?<sup>28</sup>

RAND defines workforce characteristics as a concrete and measurable aspect of a group of workers that is critical for organizational success and can be influenced by human resource management policy decisions. They cite the examples of occupa-

tion/job series, experience, competencies or skills and education (degrees or areas of study). What they mean by the distribution of the workforce characteristic is the frequency of occurrence of a workforce characteristic within an organization. These can be expressed as the number or percentage of individuals (existing inventory) or positions (organization requirements) distributed across the categories defining the workforce characteristic.<sup>29</sup>

From this was designed what they term a Three-Dimensional Distribution of Workforce Characteristics,” a display of which is reproduced here (see **Figure 1**).

**Figure 1. An Example of a Three-Dimensional Distribution of Workforce Characteristics**

	Level	Number	%	1-3		4-10		>10	
				Number	%	Number	%	Number	%
Program management	<Bachelor	64	31	3	5	9	14	52	81
	Bachelor	96	46	1	1	7	7	88	92
	Master/ Professional certification	48	23		0	4	8	44	92
	Total	208		4	2	20	10	184	88
Mechanical engineer	<Bachelor	22	3	11	50	1	5	10	45
	Bachelor	552	68	38	7	103	19	411	74
	Master/ Professional certification	214	26	17	8	43	20	154	72
	Doctor	26	3	5	19	9	35	12	46
	Total	814		71	9	156	19	587	72

Legend:

Levels of aggregation

(© 2004 RAND National Defense Research Institute)

We see then the three-dimensional distribution of the workforce for years of service, within education, and finally, within occupational series. The four questions can be answered judged by what forecasting information is available as aligned with the strategic direction of the organization and what will be needed to carry that out.

This author sees the “shape” of the workforce reflected in the occupational series and education. Pivoting the data on the basis of education, for example, projections could be made for the distribution of educational background that will be required by the organization in the years to come. By projecting how the current employees will age out of the workforce and then looking at the numbers that will be needed to replace them, the depth and breadth of needed recruiting activities or internship programs will become fairly clear. Stated concretely, but purely by way of example, the fact that this or some other organization might need 250 persons with

baccalaureate degrees and 75 persons with masters' degrees by a certain time puts the demands on the organization in some perspective. This kind of perspective helps reveal what is needed to attract and retain that quantity of people to keep the organizational shape (or meet a new shape requirement). The "years of service" figures help to telegraph how much work will be necessary to preserve the existing shape and by when and to build a new shape if the strategic direction of the organization has new requirements. If the computing capabilities and the data are warehoused sufficient to form and use trends to forecast what will happen with a high probability, then some beneficial information can be formed and important plans developed.

One area of inquiry for the author's organization has been the distribution or shape of the job levels of employees within the various agencies. By job levels is meant which classes are "training" level, "working" level, "advanced working" level, "supervisory" level, and so forth. We have noticed over time that there are many agencies where large numbers of employees have gravitated to "advanced working" level classes in excess of what the organization requires. This happened over time in response to the tenure and desire for advancement of the employees involved along with hiring and wage freezes. Taking into account this notion of organizational shape allows for trying to form a more appropriate mix of job levels which, in turn, can help to point out where future surpluses and deficiencies may be in various agencies. Being focused on the difficult-to-hire-or-train occupational groups for performing this type of supply and demand analysis using "shape" could help keep the analyses and recommendations meaningful enough and important enough to energize the organization to meet the challenges involved.

## **Discussion**

Based on all of the foregoing, it is clear how easily any workforce planner who is conducting supply and demand analyses can get caught deep in the weeds and become unable to tease out the most important information for an organization. The approach of targeting these types of analyses to the most difficult to hire or train jobs (reflected in the work of Pennsylvania) may be the only way to keep this kind of work manageable for most public sector jurisdictions. This author suspects that decision-makers will only pay attention to gaps in a gap analysis that will clearly impede the organization and if that is not evident, any proposed solutions will receive little backing. Furthermore, knowing and modeling the variables that have affected the trends of the past for an organization puts a great deal more credence into the suppositions of any workforce planner and the solutions they offer for correcting the course. It is clear why some workforce planning models emphasize an evaluation step because it also appears critical that at some point, planners assess if they were anywhere near targeting correctly what the future required.

When accepting the request to write this article, the author had a bias that some of the best approaches to workforce planning metrics and analyses would have enterprise-wide thinking at their heart. This is probably because my jurisdiction's most powerful recruiting and retention ventures — designed to meet worker shortages in

key areas like nursing and social work — came from the collective efforts of all the agencies that experienced a common need. Unfortunately, sometimes an enterprise-wide approach to planning can cause the approach to wither.<sup>30</sup> But if some enterprise-wide perspective is not placed on the gaps, how rich is the knowledge that comes from knowing the complete story for the long and short of the human capital that exists and will be required in the future? This is a dilemma that is not resolved.

A person who was investigating the state of workforce planning taking place in public jurisdictions observed not so long ago that a lot of people had conducted supply analyses but had trouble progressing beyond there.<sup>31</sup> This may still be the state of affairs, for the most part. However, the explosion of workforce planning information on the Web sites of public jurisdictions at all levels of government shows that few have given up the cause of trying to determine what the workforce needs of their agency or jurisdiction will be and formulating plans to meet those needs. Still, there are great disparities in the sophistication and predictive power of the workforce planning metrics used by the many organizations engaged in workforce planning. Perhaps that is because they must chiefly rely on data that are convenient to collect, or because their information systems are limited, or because critical partnerships have not been formed in order to bring together the most robust and important information available.

What probably is the most important thing to remember is that there are examples of workforce metric methods and practices of which all workforce planners should take note. Nobody has this down perfectly yet, however. Decision makers must be flexible in allowing the experimentation that is necessary to arrive at the vital data and information that truly informs their organization. Decision makers also must look to their ERPs and other information solutions (planned or existing) for the power they hold in telling the workforce planning stories for their organizations. Decision-makers also must be willing to get workforce planning synthesized with other strategic documents, directions and information for it to be useful.

The aging and retiring workforce of baby boomers has awakened the public sector to the need to plan ahead and be ready to meet significant challenges. We are in a position to lead the way of the other employment sectors for what to do — and not to do — when the largest numbers of employees start to leave at retirement. We have the opportunity to be the shining example, or not, as the time comes.

## Notes

- <sup>1</sup> [www.optimizemag.com](http://www.optimizemag.com), "Are You Managing Your Company's Talent?" February 2004, Issue 22
- <sup>2</sup> Young, Mary (2003) *The Aging and Retiring Government Workforce*. Lexington, MA: Center for Organizational Research, a division of Linkage, Inc. Available as a free download at <http://www.cps.ca/publications>.
- <sup>3</sup> US Department of Health and Human Services. *Building Successful Organizations: Workforce Planning in HHS* (1999). Office of Human Resources, Assistant Secretary for Management and Budget. <http://www.hhs.gov/ohr/workforce/wfpguide.htm>.
- <sup>4</sup> International Personnel Management Association. (2002) *Workforce Planning Resource Guide for Public Sector Human Resource Professionals*. Available from IPMA-HR. <http://www.ipma-hr.org>
- <sup>5</sup> US Department of Health and Human Services, page 7
- <sup>6</sup> US Department of Health and Human Services, page 7
- <sup>7</sup> U.S. Department of Energy (<http://www.ma.mbe.doe.gov/pol/WFP.htm>), State of Washington (<http://www.wa.gov/dop.workforceplanning>), Commonwealth of Virginia (<http://www.dhrm.state.va.us/workforceplanning.html>), State of Texas (<http://www.hr.state.tx.us/workforce/workforceplanning.html>), United States Army (<http://cpo.army.mil/library/civplans/workforce/>), State of Minnesota (<http://www.doer.state.mn.us/wfplanning/>), U.S. Department of Agriculture Forest Service (<http://www.fs.fed.us/r1/nfp/workforce/>), U.S. Department of the Interior (<http://www.doi.gov/hrm/pmanager/gm1f.html>), U.S. Department of Energy (<http://www.ma.mbe.doe.gov/pol/WFP.htm>) are but a few examples.
- <sup>8</sup> Morfeld, Christina (2002) *Workforce Planning: The Strategy Behind Strategic Staffing*. HR.COM
- <sup>9</sup> NAPA (1999) *Building the Workforce of the Future to Achieve Organizational Success*, Washington, DC, p. viii.
- <sup>10</sup> As a simple but recent example, just as soon as the State of Connecticut believed it had a handle on the likely amount of turnover in the near term that would result from the retirement of an aging workforce, approximately 2,800 employees received lay-off notices and an early retirement incentive plan (ERIP) was announced adding three years to the time in service or age of persons who could then qualify for retirement. This was one facet of the state's attempt to meet budget deficit problems and slumping revenues experienced by the majority of public jurisdictions in the past few years. If this executive action didn't send projections into a twirl by itself, add to this the interesting twist that a very large barrier loomed in front of many potential retirees. That is, the economy was in a slump and most persons were finding the value of their 457(K) retirement plans to have dipped significantly. Therefore, while there was an immediate increase in the number of people who could retire because of ERIP and they would be receiving normal retirement income and health benefits respective of the age and years of service, when push came to shove for deciding whether or not to accept the package, the economy, and specifically their retirement savings made the difference in determining whether to accept the package or not.
- <sup>11</sup> <http://www.kronos.com>
- <sup>12</sup> <http://www.ultimatesoftware.com>
- <sup>13</sup> <http://www.hrmyway.com>
- <sup>14</sup> <http://www.peoplesoft.com>
- <sup>15</sup> <http://www.sas.com>
- <sup>16</sup> <http://www.sap.com>
- <sup>17</sup> Jason Averbook, PeopleSoft®, personal communication, July 2, 2004.
- <sup>18</sup> <http://www.doer.state.mn.us/wfplanning/>

- <sup>19</sup> <http://www.hr.state.tx.us/Workforce/examples.html>
- <sup>20</sup> <http://web1.dhrm.state.va.us/itech/itworkforce.htm>
- <sup>21</sup> This author has fallen prey to establishing trends on most all the obvious demographics available on the workforce only to then come to a quandary deciding if this is truly the information that is needed. The venture was particularly difficult because the information systems at my disposal did not have easily mined historical information. Further, how information was coded (separations, for example) was not helpful because persons in separation records were only persons who left state service completely so persons who resigned but went to other agencies could not be easily tracked and quantified.
- <sup>22</sup> This author's jurisdiction took very focused action to hire scores of persons to a particularly troublesome job classification in a short period of time. Attrition data was figured in (both for resignations and promotions) along with what was necessary in order to correct imbalances in workload distribution. We then also figured in what we knew of attrition during training and the working test period to set hiring targets to be on top of the curve. What we didn't figure in was that when we greatly accelerated the hiring process, it didn't allow some normal self-screening to take place on the candidates. It dawned upon the new employees after they were hired that this was not the job for them at rates higher than the hiring agency was used to. Consequently, a procedural change led to more attrition by persons in training that was not properly figured into the equation that put an additional load on the recruitment and selection process.
- <sup>23</sup> Young, Mary (2003) Page 113
- <sup>24</sup> Young, Mary (2003) Page 7
- <sup>25</sup> <https://cpwass.belvoir.army.mil/Wass/wasshome.htm>
- <sup>26</sup> [www.armyg1.army.mil/hr/demographics/Symposium02/DrCrosby\\_02.ppt](http://www.armyg1.army.mil/hr/demographics/Symposium02/DrCrosby_02.ppt)
- <sup>27</sup> Emmerichs, R., Marcum, C., & Robbert, A. (2004) An Operational Process for Workforce Planning. Arlington, VA: RAND. RAND URL: <http://www.rand.org/>
- <sup>28</sup> Emmerichs, et al., Page 9
- <sup>29</sup> Emmerichs, et al., Page 10
- <sup>30</sup> Al Robbert, personal communication, June 1, 2004.
- <sup>31</sup> David Dye, personal communication, June 2001.

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